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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,983	03/26/2004	Yar-Ming Wang	GP-304670	9619
7590 Kathryn A. Marra General Motors Corporation Mail Code 482-C23-B21 PO Box 300 Detroit, MI 48265-3000		EXAMINER MAYEKAR, KISHOR		
		ART UNIT 1795		PAPER NUMBER
		MAIL DATE 06/24/2008		DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,983

Applicant(s)

WANG ET AL.

Examiner

Kishor Mayekar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102 and § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 2, 10 and 15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Gernon et al. (US 6,187,169 B1). Gernon's invention is directed to a method for the generation of organosulfonic acid from its salts. Gernon discloses in col. 9, lines 12-28 that, if cathodic hydrogen formation is not desired and the metal being deposited has a tendency to promote hydrogen formation, the method comprises the recited steps of producing and transporting.
3. Claims 11-13, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gernon '169. The differences between Gernon are the recited voltage and current density and the overlapping of pH range.

As the two former difference, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference's teachings because it has been settled that proper adjustment of

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a known effective variable of a known or obvious process is within the capabilities of one having ordinary skill in the art. *In re Aller* 105 USPQ 233; *In re Boesch* 205 USPQ 215.

As to the overlapping of pH range, it has been held that the disclosure in the prior art of any value within the claimed range is an anticipation of that range. And a prima facie case of obviousness exists in the case where the claimed range overlaps range disclosed by the prior art, *In re Wertheim* 191 USPQ 90.

4. Claims 1, 2, 4-10, 14, 15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polan et al. (US 4,568,431) by itself or in view of Gernon '169. Polan's invention, a reference cited in the last Office action, is directed to a process for producing electroplated and/or treated metal foil. Polan discloses that the process comprises an electrolytic cleaning as a pretreatment step wherein the electrolytic cleaning is primarily to remove residual grease, oil and other contaminants from earlier processing of the foil (col. 5, lines 3-68), the provision a surface impurity removing means including a skimmer floating on the surface of a treating solution in the tank and/or an overflow system for removing solution from the tank and passing it through an off-line solution filtration/replenishment loop (col. 2, lines 39-55), and the continuous withdrawal of solution from tank 14 (Fig. 2). Although Polan does not disclose the limitation that the electrolytic cleaning dislodges adhered metal particle matter from the surface, however since Polan discloses the electrolytic cleaning being primarily to remove residual grease, oil

and other contaminants from earlier processing of the foil and the agitation produced at the foil surfaces by the hydrogen bubbles generated from the electrolysis (the electrolytic cleaning), it appears that Polan's process would lead one skilled in the art towards the limitation in absence of evidence to the contrary when the other contaminants are metal particle matter. This evidence is taught when combining Polan's teachings with Gernon's teachings, where Gernon's teachings are applied in the preceding paragraphs.

As to the subject matters of claims 17, 19 and 20, it has been held that the disclosure in the prior art of any value within the claimed range is an anticipation of that range. And a prima facie case of obviousness exists in the case where the claimed range overlaps range disclosed by the prior art, *In re Wertheim* 191 USPQ 90.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Polan '431 or Polan '431 in view of Gernon '169 as applied to claims 1, 2, 4-10, 14, 15 and 17-20 above, and further in view of Lauke (US 4,568,438). Polan as applied above further discloses in col. 9, line 56 through col. 10, line 54 the continuous withdrawal of the solution to remove the surface impurities or contaminants from the treatment tank 14. The difference between the reference(s) as applied above and the instant is the provision of the recited eductor. Lauke, another reference cited in the last Office action, teaches in a method for making an electroimmersion finish the limitation (Figs. 1 and 2). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the

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time the invention was made to have modified Polan's teachings as shown by Lauke because the selection of any of known recirculation of the solution with contaminant removal would have been within the level of ordinary skill in the art.

6. Claims 11-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Polan '431 or Polan '431 in view of Gernon '169 as applied to claims 1, 2, 4-10, 14, 15 and 17-20 above, and further in view of Sallo et al. (US 3,668,090) or Smith (US 4,270,986), both references in the last Office action. The difference between the reference(s) as applied above and the instant claims is the recited voltage and electrolyte medium. Sallo teaches in a method of electroalkaline cleaning process of ferrous strands the limitations (col. 1, line 51 through col. 2, line 52). Smith teaches the same in a method for soldering aluminum (paragraph 2). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference(s)'s teachings as shown by either Sallo or Smith because the selection of voltage and electrolyte medium for the cathodic cleaning would have been within the level of ordinary skill in the art.

Response to Arguments

7. Applicant's arguments filed 4 March 2008 have been fully considered but they are not persuasive because of the new ground of rejections as set forth in the paragraphs

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above.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kishor Mayekar/
Primary Examiner, Art Unit 1795